REMARKS

Claims 1-46 are pending. Claims 1, 12, 20, 31, and 41 are in independent form.

Objections to the Specification

The specification was objected to as allegedly asserting "that program code being transmitted across a transmission medium somehow represents 'implemented code.'" *See Office action mailed September 26, 2008*, page 4, first full paragraph; page 4, first full paragraph.

Although applicant disagrees, the specification has been amended to delete reference to transmission devices and to clarify that the recited media are limited to "storage devices." Accordingly, Applicant requests that the objection to the specification be withdrawn.

Rejections under 35 U.S.C. § 101

Claims 20-39 were rejected under 35 U.S.C. § 101 as allegedly directed to a judicial exception to statutory subject matter. The rejections were made on various grounds

Although applicant disagrees with the rejections, as shown above, claims 20-28 and 40[1] have been amended to relate to computer-readable storage devices. Accordingly, Applicant requests that the rejections be withdrawn.

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[1] Applicant has assumed that the reference to claim 39, and the omission of claim 40, in the rejection under 35 U.S.C. § 101 was a typographical error. If this assumption is in error, applicant respectfully requests that the present response be considered *bona fide*, the basis for the rejection of claim 39 be stated, and an extended period for response be provided.

Rejections under 35 U.S.C. § 103(a)

In the office action mailed September 26, 2008, <u>claims 1 and 20</u> were rejected under 35

U.S.C. § 103(a) as obvious over a combination of the following four references:

-U.S. Patent No. 6,101,515 to Wical et al. (hereinafter "Wical '515");

-U.S. Patent No. 6,038,560 to Wical et al. (hereinafter "Wical '560");

-U.S. Patent No. 5,806,060 to Borgida et al. (hereinafter "Borgida"); and

-U.S. Patent No. 5,930,788 to Wical et al. (hereinafter "Wical '788").

Claim 1 relates to a machine-implemented method that includes receiving, from a user, a

primary term representing a new first concept to be created in an existing machine-readable network

of interrelated concepts, receiving, from the user, at least one related term associated with the

primary term and representing the new first concept, receiving at least one relationship between the

new first concept and a second concept, receiving a relationship type characterizing the at least one

relationship, receiving a strength value characterizing the at least one relationship, representing the

association between the primary term and the at least one related term, the at least one relationship,

and the relationship type to the user on the user interface, receiving a user request to add the new first

concept to the machine-readable network of interrelated concepts, and in response to the user request,

creating the new first concept in the existing machine-readable network of interrelated concepts to

expand the existing network of interrelated concepts by adding the new first concept to the existing

network of interrelated concepts. A concept comprises a normalized semantic representation.

Creating the new first concept comprises adding the primary term, the related term, the relationship

between the first concept and the second concept, the relationship type, and the strength value to the

existing machine-readable network of interrelated concepts to represent the new first concept.

Claim 20 relates to one or more computer-readable storage devices comprising program code

tangibly embodied in machine-readable format and operable to cause one or more machines to

perform operations. The operations are related to the activities of claim 1.

The rejections of claims 1 and 20 contend that it would have been obvious for one of ordinary skill to have combined Wical '515, Wical '560, Borgida, and Wical '788 and to have arrived at the recited subject matter.

Applicant respectfully disagrees. Both claims 1 and 20 relate to the addition of a concept to a machine-readable network of interrelated concepts. Moreover, a user is involved in these additions. For example, claims 1 and 20 both recite that a primary term and a related term that represent the same first concept are received from a user and added to a machine-readable network of interrelated concepts. Further, a relationship type and a strength value are also added.

As discussed numerous times previously, none of Wical '515, Wical '560, Borgida, and Wical '788 describe or suggest such an addition of a concept to a machine-readable network of interrelated concepts. *See, e.g., Responses filed February 4, 2008, July 1, 2008, September 2, 2008,* the contents of all of which are incorporated herein by reference. Accordingly, none of Wical '515, Wical '560, Borgida, and Wical '788 would make the recited addition obvious to those of ordinary skill.

The Office action mailed September 26, 2008 indicated that these arguments were unpersuasive for a variety of reasons. The arguments are presented below in single-spaced, boldfaced type, with applicant's responses following.

> **The Examiner respectfully disagrees in that under the broadest reasonable interpretation, the use of individual words or phrases to define a category would readily read upon the recited feature of a "normalized semantic representation." That is, wherein letters are combined to create discernable terms and phrases, said terms and phrases would sufficiently read upon the requirement of "normalized semantic representations."**

None of Wical '515, Wical '560, Borgida, and Wical '788 create new concepts by adding a primary term, a related term, a relationship between a first concept and a second concept, a relationship type, and a strength value to a existing machine-readable network of interrelated concepts.

Even if a combination of letters to create discernable terms and phrases where somehow taken to be the creation of a normalized semantic representations and hence a new concept, letters are not terms. Combining letters does not describe or suggest that concepts be added in the recited manner.

> **Additionally, Applicant notes that the combination of letters to spell terms and phrases does not read upon a concept which is "expressed by a collection of terms." See Amendment, page 14. The Examiner respectfully disagrees in that Wical discloses that a user may select a number of terms for categorization purposes.**

The rejection of claims 1 and 20 is based on the contention that the classification of terminology in Wical '515 somehow relates to the creation of a new concept in an existing machine-readable network of interrelated concepts. *See, e.g., Office Action mailed September, 26, 2008*, page 6, paragraph 13. *See also Office Action mailed May 1, 2008*, page 3, paragraph 9 (*citing Wical '515*, col. 4, line 49-65).

In Wical '515, each term is classified successively, on a term-by-term basis, into one or more categories of a classification hierarchy. *See, e.g., Wical '515*, Abstract. As best understood, the rejection now contends that this term-by-term classification somehow creates a new first concept by adding a primary term and a related term.

Applicant respectfully disagrees. There is no reason to believe that the classification of individual terms somehow creates a concept in Wical '515. Indeed, the remainder of the rejection is based on the contention that individual terms are concepts and that letters are terms.

Additionally, Applicant asserts the argument that Wical '515 itself does not consider the terminology described therein to be concepts that comprise normalized semantic representations. Specifically, Applicant relies upon NPL document "Ontology Learning from Text: Methods, Evaluation and Applications," P. Buitelaar et al. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "normalized semantic representations") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification or other documents, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant respectfully disagrees. Attention is respectfully directed to claims 1, 20, and the remainder of the independent claims, which affirmatively recite that a concept comprises a normalized semantic representation. Accordingly, Applicant is not relying upon features which are not recited in the claims.

As for Buitelaar, Buitelaar provides additional support for applciant's contention that terminology is distinguishable from concepts. As discussed in the previous response, the specification, the cited references, and Buitelaar all distinguish between terminology and concepts. Accordingly, the continued conflation of terminology and concepts, and of letters and terms, is not reasonable.

Thus, for the reasons set forth above and in the Responses filed February 4, 2008, July 1, 2008, and September 2, 2008, claims 1 and 20 are not obvious over Wical '515, Wical '560, Borgida, and Wical '788. Applicant respectfully requests that the rejections of claims 1, 20, and the claims dependent therefrom be withdrawn.

Claims 12 and 31 were rejected under 35 U.S.C. § 103(a) as obvious over a combination of

the following three references:

-U.S. Patent No. 6,101,515 to Wical et al. (hereinafter "Wical '515");

-U.S. Patent No. 6,038,560 to Wical et al. (hereinafter "Wical '560"); and

-U.S. Patent No. 5,806,060 to Borgida et al. (hereinafter "Borgida").

Claim 12 relates to a machine-implemented method. The method includes receiving, from a

user, a request to edit a first concept in an existing machine-readable network of interrelated

concepts, representing the first concept on a display for the user, including displaying a first

collection of terms that express the first concept and a description of one or more existing

relationships between the first concept and other concepts in the existing machine-readable network

of interrelated concepts, receiving, from the user, at least one new relationship between the first

concept and a second concept, receiving a relationship type characterizing a type of the at least one

new relationship, receiving a strength value characterizing a strength of the at least one new

relationship, updating the machine-readable network of interrelated concepts to reflect the at least

one new relationship, the relationship type, and the strength value representing the updated first

concept on the display for the user, wherein the display includes a description of the at least one new

relationship. A concept comprises a normalized semantic representation and is expressed by a

collection of terms.

Claim 31 relates to one or more computer-readable storage devices comprising program code

tangibly embodied in machine-readable format and operable to cause one or more machines to

perform operations. The operations are related to the activities of claim 12.

The rejections of claims 12 and 31 are based on the contention that requests to verify classifications of terminology in Wical '515 constitute a request to edit a concept in a network of interrelated concepts. Applicant respectfully disagrees. As discussed numerous times previously, the claims recite that a concept comprises a normalized semantic representation. The terminology that are learned and classified in Wical '515 are not such "concepts." Instead, terminology in Wical '515 are individual words or phrases.

As discussed numerous times previously, Borgida and Wical '560 fail to remedy these deficiencies in Wical '515. Accordingly, even if Borgida, Wical '515 and Wical '560 were combined, one of ordinary skill would not arrive at the subject matter recited in claims 12 and 31. Accordingly, Applicant respectfully requests that the rejections of claims 12, 31, and the claims dependent therefrom be withdrawn.

Claim 41 was rejected under 35 U.S.C. § 103(a) as obvious over a combination of the following three references:

  -U.S. Patent No. 6,101,515 to Wical et al. (hereinafter "Wical '515");

  -U.S. Patent No. 6,038,560 to Wical et al. (hereinafter "Wical '560"); and

  -U.S. Patent No. 5,806,060 to Borgida et al. (hereinafter "Borgida").

Claim 41 relates to a user display that includes an identifier of a first concept in a machine-readable ontology of concepts, a list of two or more terms that represent the first concept, a list of two or more parent/child relationships between the first concept and other concepts in the ontology, a list of two or more child/parent relationships between the first concept and other concepts in the ontology, and a list of two or more lateral relationships between the first concept and other concepts in the ontology. A concept comprises a normalized semantic representation.

As discussed previously, none of Wical '515, Wical '560, and Borgida describe or suggest this subject matter. For example, claim 41 recites that, in addition to an identifier of a concept, a display includes lists of two or more terms that represent the concept, parent/child relationships, child/parent relationships, and lateral relationships. One example of such a display is shown in FIG. 4 of Applicant's specification. Such lists are believed to present significant advantages vis-à-vis Wical '560's hierarchical or directed graphs. In particular, as the number of terms representing a concept, the number of parent/child relationships, the number of child/parent relationships, and the number of lateral relationships increases, the recited display is believed to be much more adept at presenting information in a format that is accessible to a user.

Accordingly, claim 41 is not obvious over Borgida, Wical '515, and Wical '560. Applicant respectfully requests that the rejections of claims 41 and 42 be withdrawn.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Please apply the excess claims fees and one-month extension of time, along with any other

charges or credits, to Deposit Account No. 06-1050.

Respectfully submitted,

Date: January 26, 2009   /John F. Conroy, Reg. #45,485/
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